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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,076	08/25/2000	Siamack Nemazie	Nemazie-01 US	5669
27728	7590	05/25/2005	EXAMINER	
LAW OFFICES OF IMAM 111 N. MARKET STREET, SUITE 1010 SAN JOSE, CA 95113			NGUYEN, STEVEN H D	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/648,076

Applicant(s)

NEMAZIE, SIAMACK

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/15/05 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma (USP 6157643).

Ma discloses switching network (Fig 2) including rows and columns of switches comprising a first stage of switches (Fig 2, Ref SE1) defining a first column of said switching network having input lines and output lines and comprising  $m$  ( $n \times k$ ) input switches (Fig 2, each input element comprises  $n \times m$  inputs and outputs), wherein  $m$  is an integer number,  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a second stage of switches (Fig 2, Ref SE2) defining a second column of said switching network comprising of  $m$  ( $k' \times k'$ ) middle switches (Fig 2, each internal element comprises  $k \times k$  inputs and outputs),  $k'$  is an integer number representing the number of inputs and outputs; and a third stage of switches (Fig 2, Ref SE3) defining a third column of said switching network comprising of  $m$  ( $k \times n$ ) switches (Fig 2, each output element comprises  $m \times n$  input and output) and a plurality of modules (Fig 2), each module defining a row of the switching network and including one input switch of the first stage of switches (Fig 2, SE1, input element), one middle switch of the second stage of switches (Fig 2, SE2, Ref internal element), one output switch of the third stage of switches (Fig 2, SE3, output element) the modules of the plurality of modules are identical ( $k=m=n=4$  to define the switching network, See col. 1, lines 20-25 and col. 6, lines 44-64,). However, Ma fails to disclose  $k'$  is selected such that  $m \cdot Q(k'/m) \geq k$  (where  $Q(x/y)$  denotes the quotient of dividing  $x$  by  $y$ ) to allow using  $m$  switches in the second stage. However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  in order to have  $m$  switches in each stage into Ma's system because it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954) and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ

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237 (CCPA 1955). The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goeldner (USP 5325090).

Goeldner discloses switching network (Fig 1) including rows and columns of switches comprising a first stage of switches (Fig 1, Ref first switching stage) defining a first column of said switching network having input lines and output lines and comprising  $m$  ( $n \times k$ ) input switches (Fig 1, each switch comprises  $4 \times 4$  inputs and outputs), wherein  $m$  is an integer number,  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a second stage of switches (Fig 1, Ref second switching stage) defining a second column of said switching network comprising of  $m$  ( $k' \times k'$ ) middle switches (Fig 1, each switch comprises  $4 \times 4$  inputs and outputs),  $k'$  is an integer number representing the number of inputs and outputs; and a third stage of switches (Fig 1, Ref third switching stage) defining a third column of said switching network comprising of  $m$  ( $k \times n$ ) switches (Fig 1, each switch comprises  $m \times n$  input and output) and a plurality of modules (Fig 1), each module defining a row of the switching network and including one input switch of the first stage of switches (Fig 1, first switching stage), one middle switch of the second stage of switches (Fig 1, second switching stage), one output switch of the third stage of switches (Fig 1, third switching stage) the modules of the plurality of modules are identical (the input and output of the switches are 4 to define the switching network, see col. 3, lines 38-58). However, Goeldner fails to disclose  $k'$  is selected such that  $m * Q(k'/m) k$  (where  $Q(x/y)$  denotes the quotient of dividing  $x$  by  $y$ ) to allow using  $m$  switches in the second stage. However, it would have been

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obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  being active in order to have  $m$  switches in each stage into Goeldner's system because it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954) and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Briinle (USP 5103220) discloses a method and system for expanding a three stage switching by using the identical modules for first and last stage and a different module for the middle stage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'S. Nguyen', with a long horizontal stroke extending to the right.

Steven HD Nguyen  
Primary Examiner  
Art Unit 2665  
5/23/05